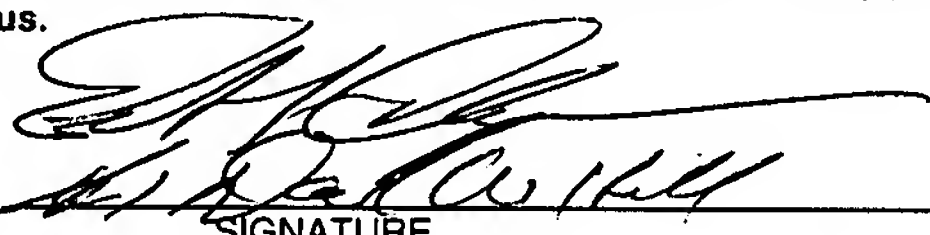


<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		CUSTOMER NO. 22,852 ATTORNEY'S DOCKET NUMBER: 07553.0065
INTERNATIONAL APPLICATION NO. PCT/JP2005/003609	INTERNATIONAL FILING DATE March 3, 2005	U.S. APPLICATION NO. if known, see 37 CFR 1.5 10/591,645
PRIORITY DATE CLAIMED March 5, 2004		
<b>TITLE OF INVENTION PROBE AND METHOD OF MANUFACTURING PROBE</b>		
<b>APPLICANT(S) FOR DO/EO/US 1) Katsuya OKUMURA and 2) Toshihiro YONEZAWA</b>		
Applicant(s) herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <li>1. <input type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</li> <li>2. <input checked="" type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</li> <li>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</li> <li>4. <input type="checkbox"/> The US has been elected (Article 31).</li> <li>5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> has been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed with the United States Receiving Office (RO/US).</li> </ol> </li> <li>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> is attached hereto.</li> <li>b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</li> </ol> </li> <li>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371 (c)(3)).           <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</li> <li>b. <input type="checkbox"/> have been communicated by the International Bureau.</li> <li>c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</li> <li>d. <input type="checkbox"/> have not been made and will not be made.</li> </ol> </li> <li>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).</li> <li>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371 (c)(4)).</li> <li>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371 (c)(5)).</li> </ol>		
<b>Items 11 to 20 below concern document(s) or information included:</b>		
<ol style="list-style-type: none"> <li>11. <input type="checkbox"/> Information Disclosure Statement under 37 CFR 1.97 and 1.98</li> <li>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</li> <li>13. <input type="checkbox"/> A preliminary amendment, with Abstract.</li> <li>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</li> <li>15. <input type="checkbox"/> A Substitute specification.</li> <li>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</li> <li>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821-1.825.</li> <li>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154 (d)(4).</li> <li>19. <input type="checkbox"/> A second copy of the English language translation of the international application 35 U.S.C. 154 (d)(4).</li> <li>20. <input checked="" type="checkbox"/> Other items or information:           <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> Cover page of WIPO Publication No. <b>WO 2005/085877 A1</b>.</li> <li>b. <input checked="" type="checkbox"/> Copy of Notification of Missing Requirements.</li> <li>c. <input checked="" type="checkbox"/> Copy of Receipt Card from OIPE..</li> <li>d. <input checked="" type="checkbox"/> Response Notification Of Missing Requirement.</li> <li>f. <input checked="" type="checkbox"/> Copy of English language translation of the as-filed International Application filed in the USPTO on September 5, 2006.</li> </ol> </li> </ol>		

U.S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/591,645		INTERNATIONAL APPLICATION NO. PCT/JP2005/003609		ATTORNEY'S DOCKET NUMBER 07553.0065	
The following fees have been submitted:				CALCULATIONS	PTO Use Only
21. <input checked="" type="checkbox"/> BASIC NATIONAL FEE (37 CFR 1.492(a)): .....\$300.00					
22. <input checked="" type="checkbox"/> Examination fee (37CFR 1.492(c))					
If the Written opinion prepared by ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....\$0					
All other situations.....\$200					
23. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b))					
If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4) .....\$0					
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority.....\$100					
International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB.....\$400					
All other situations.....\$500					
<b>TOTAL of 21, 22 and 23 =</b>					
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.					
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number)	Rate		
17 - 100 =	/50=		x \$250.00		
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).					
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total Claims	4 - 20 =	0	x \$50.00		
Independent Claims	2 -3 =	0	x \$200.00		
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+\$360.00		
<b>TOTAL OF ABOVE CALCULATIONS =</b>					
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.					
<b>SUBTOTAL =</b>					
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest priority date (37 CFR 1.492(i)). +					
<b>TOTAL NATIONAL FEE =</b>					
Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property. +					
<b>TOTAL FEES ENCLOSED =</b>					
				Amount to be refunded:	\$
				charged:	\$
a. <input type="checkbox"/> A check in the amount of \$_____ to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$_____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>06-0916</u> . A duplicate copy of this sheet is enclosed. d. <input type="checkbox"/> Fees are to be charged to a credit card. <b>WARNING:</b> Information on this form may become public. <b>Credit card information should not be included on this form.</b> Provide credit card information and authorization on PTO-2038.  <b>NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.</b>  <b>SEND ALL CORRESPONDENCE TO:</b>  Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P. 901 New York Avenue, N.W. Washington, DC 20001-4413 DWH/FPD/sci  DATED: June 6, 2007					

  
\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
David W. Hill/28,220  
NAME/REGISTRATION NUMBER

**ERNEST F. CHAPMAN**  
**Reg. No. 25,961**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:	)	
	)	
<b>Katsuya OKUMURA et al.</b>	)	<b>Group Art Unit: Not Yet Assigned</b>
	)	
Application No.: <b>10/591,645</b>	)	<b>Examiner: Not Yet Assigned</b>
	)	
Filed: <b>Not Yet Assigned</b>	)	
	)	
National Stage of International Application	)	
No. <b>PCT/JP2005/003609</b> under 35 U.S.C.	)	
371, for <b>PROBE AND METHOD OF</b>	)	
<b>MANUFACTURING PROBE</b>	)	

**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, VA 22313-1450**

Sir:

**RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS**

**UNDER 35 U.S.C. 371 ISSUED IN ERROR**

The Notification of Missing Requirements dated May 7, 2007, indicates that the English language translation of the above-identified application is missing and must be furnished within two months from the date of this Notice or by 32 months from the priority date for the application. It is respectfully submitted that this notice has been issued in error and should be withdrawn.

In response to the Notification of Missing Requirements, enclosed is a copy of the as-filed English-language translation filed on September 5, 2006. Also enclosed is a copy of the receipt card from OIPE dated September 5, 2006, to corroborate that the translation was filed on that date.

In view of the fact that the English-language translation was properly filed on September 5, 2006, applicants submit that the requirements for submission of an English-language translation has been made in error. All of the requirements were met on September 5, 2006, including the payment of a filing fee of \$940.00 (\$900.00 for filing fee and \$40.00 for assignment fee) and authorization to charge any additional filing fees to the designated deposit account.

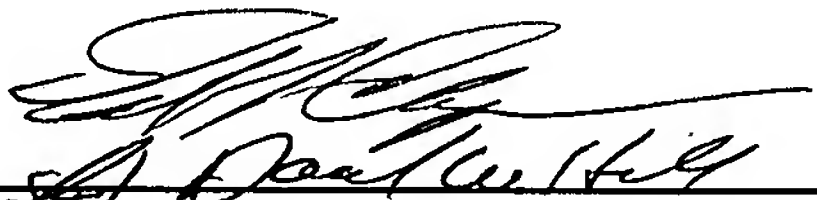
Since the English-language translation was timely filed on September 5, 2006, there should be no fee required for the submission of the enclosed copy of the English-language translation. Accordingly, it is respectfully requested that the requirement of any processing fees should be withdrawn. However, if it is determined that such a fee is required, authorization is given to charge the fee to our deposit account no. 06-0916.

Please associate the enclosed copy of the English-language translation with the application as filed on September 5, 2006, and assigned serial number 10/591,645.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: June 6, 2007

By:   
David W. Hill  
Reg. No. 28,220

Enclosures  
DWH/FPD/sci

ERNEST F. CHAPMAN  
Reg. No. 25,961



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/591,645	Katsuya OKUMURA	07553.0065

22852  
 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER  
 LLP  
 901 NEW YORK AVENUE, NW  
 WASHINGTON, DC 20001-4413

INTERNATIONAL APPLICATION NO.

PCT/JP05/03609

I.A. FILING DATE

PRIORITY DATE

03/03/2005

03/05/2004

CONFIRMATION NO. 1797

371 FORMALITIES LETTER



\*OC000000023721863\*

Date Mailed: 05/07/2007

### NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 09/05/2006
- Copy of the International Search Report filed on 09/05/2006
- Copy of IPE Report filed on 09/05/2006
- Preliminary Amendments filed on 09/05/2006
- Information Disclosure Statements filed on 09/05/2006
- Oath or Declaration filed on 09/05/2006
- U.S. Basic National Fees filed on 09/05/2006
- Assignment filed on 09/05/2006
- Priority Documents filed on 09/05/2006

**RECEIVED**

MAY 09 2007

Finneegan, Henderson, Farabow,  
 Garrett & Dunner, L.L.P.

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Translation of the application into English. Note a processing fee will be required if submitted later than 30 months from the priority date.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

**RTK**

MAY 16 2007

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.  
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebs>.

**If you are not using EFS-Web to submit your reply, you must include a copy of this notice.**

FRANCINE YOUNG

Telephone: (703) 308-9140 EXT 215

**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/591,645	PCT/JP05/03609	07553.0065

FORM PCT/DO/EO/905 (371 Formalities Notice)



DWH/USD

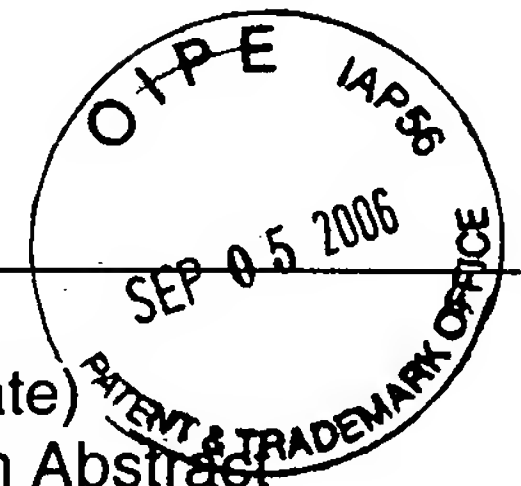
17

**PLEASE STAMP TO ACKNOWLEDGE RECEIPT OF THE FOLLOWING:**

National Stage of International Application No. **PCT/JP2005/003609** under 35 U.S.C. 371, for  
**PROBE AND METHOD OF MANUFACTURING PROBE**

Inventors: **1) Katsuya OKUMURA and 2) Toshihiro YONEZAWA**

**MAIL STOP PCT**



1. Check in the amount of \$940.00
2. Transmittal Letter concerning a filing under 35 U.S.C. 371. (Duplicate)
3. First Preliminary Amendment, including 4 claims (as amended), with Abstract
4. Cover page of WIPO Publication No. **WO 2005/085877 A1**
5. English translation of International Application No. PCT/JP2005/003609, comprising 14 sheets, including 5 claims, and 3 sheets of drawings
6. Declaration of the inventors
7. Information Disclosure Statement and Information Disclosure Citation, PTO-1449 with documents attached
8. Assignment Recordation Form Cover Sheet.
9. Assignment document for recording.

Dated: **September 5, 2006**

(Due Date: **September 5, 2006**)

Docket No.: **07553.0065**

CUSTOMER NUMBER: **22,852**

**DWH/FPD/sci - Mail Drop 610A**

*Ok to 9.606 pm*

(19) 世界知的所有権機関  
国際事務局



(43) 国際公開日  
2005 年 9 月 15 日 (15.09.2005)

PCT

(10) 国際公開番号  
WO 2005/085877 A1

- (51) 国際特許分類<sup>7</sup>: G01R 1/067, H01L 21/66  
(21) 国際出願番号: PCT/JP2005/003609  
(22) 国際出願日: 2005 年 3 月 3 日 (03.03.2005)  
(25) 国際出願の言語: 日本語  
(26) 国際公開の言語: 日本語  
(30) 優先権データ:  
特願2004-063228 2004 年 3 月 5 日 (05.03.2004) JP  
(71) 出願人 (米国を除く全ての指定国について): 株式会社  
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都新宿区若葉一丁目 2 2 番地 1-1 0 3 Tokyo (JP).

東京エレクトロン株式会社 (TOKYO ELECTRON  
LIMITED) [JP/JP]; 〒1078481 東京都港区赤坂五丁目  
3 番 6 号 Tokyo (JP).

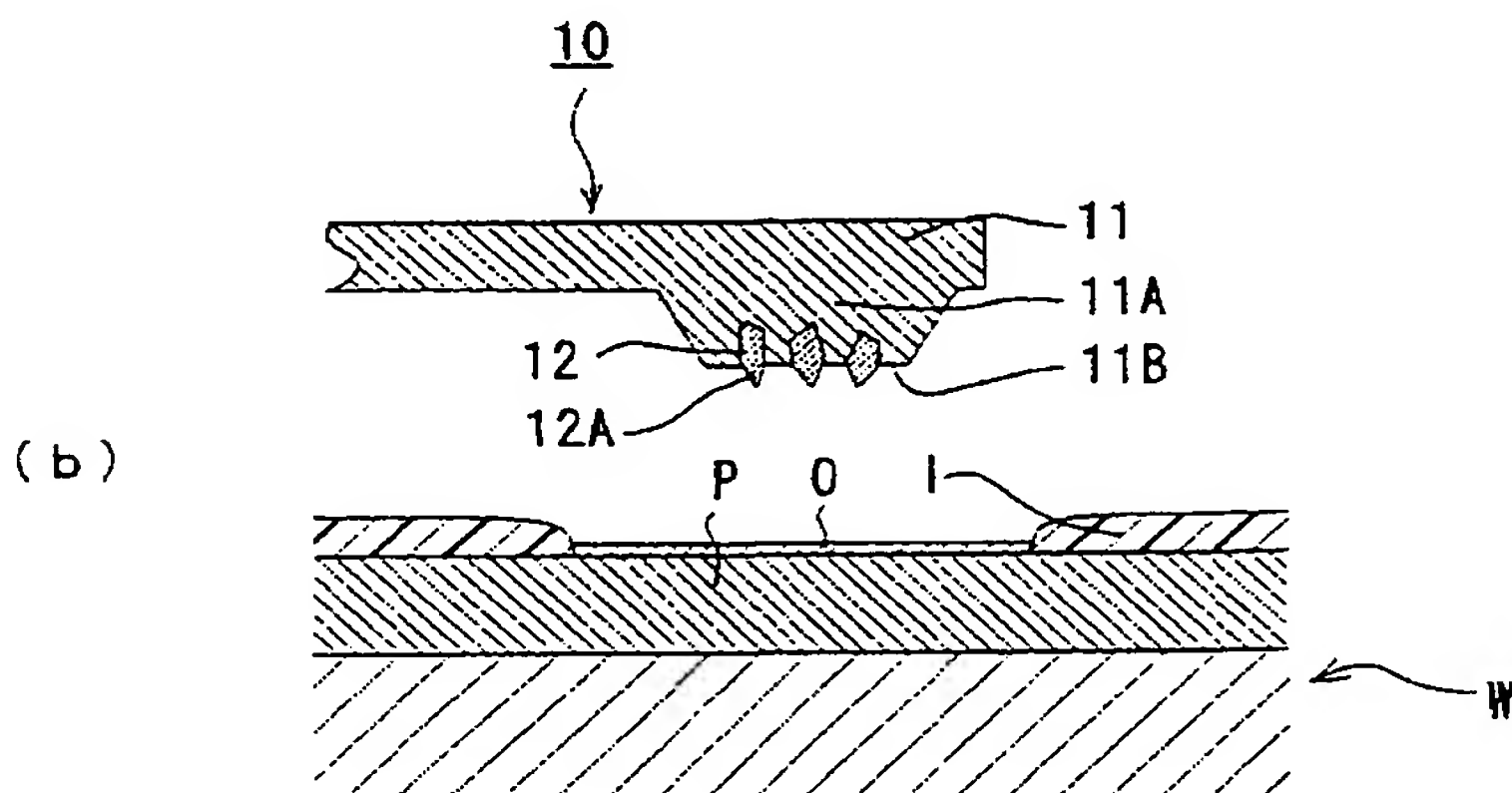
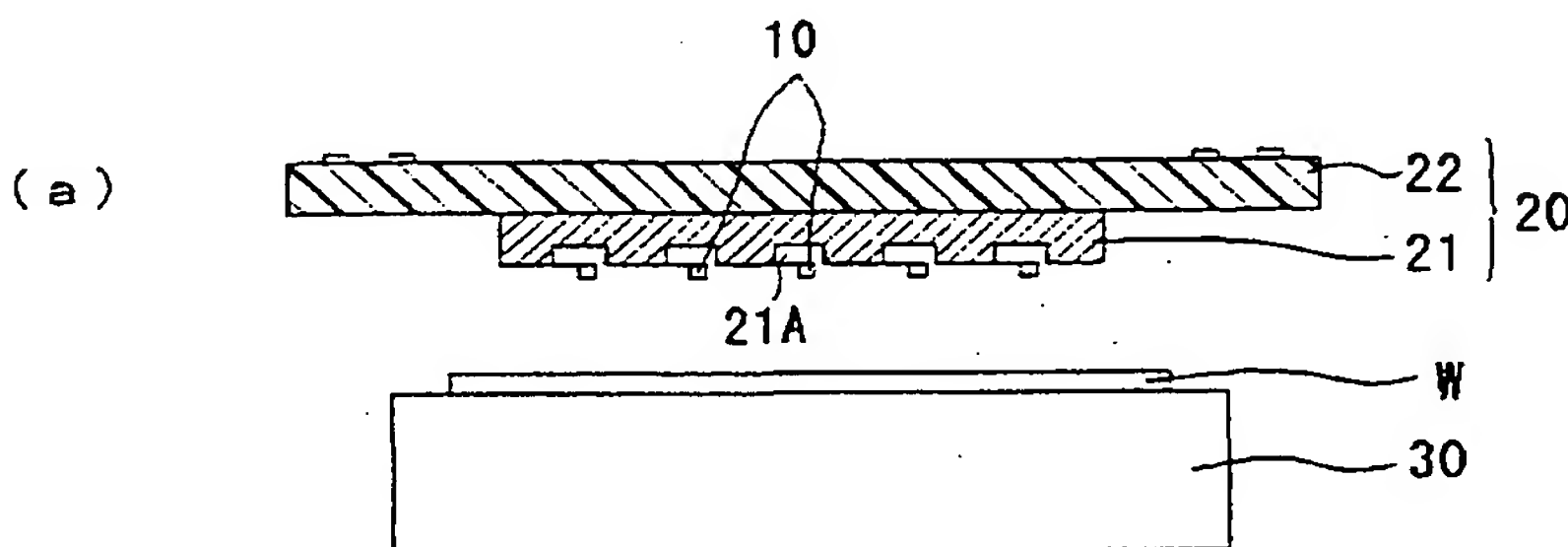
- (72) 発明者; および  
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- (74) 代理人: 金本 哲男, 外 (KANEMOTO, Tetsuo et al.);  
〒1620065 東京都新宿区住吉町 1-1 2 新宿曙橋ビ  
ル はづき国際特許事務所 Tokyo (JP).

(続葉有)

(54) Title: PROBE AND PROBE MANUFACTURING METHOD

(54) 発明の名称: プローブ及びプローブの製造方法



(57) Abstract: Since microminiaturization of a wiring structure and film thinning have been rapidly progressed due to speed increase, the wiring layer has become extremely thin. Therefore, when an inspection is performed by applying a contact load on a probe as in the conventional cases, the probe penetrates not only an oxide film but also the wiring layer, and the wiring layer and an insulating layer are damaged due to concentrated stress from the probe. On the contrary, when the contact load is reduced, electrical continuity between the probe and an electrode pad becomes unstable. A probe is provided to surely and stably inspect an inspecting object by penetrating an oxide film with a low needle pressure. At the time of performing electrical characteristic inspection on the inspecting object, the probe is electrically brought into contact with the inspecting object. The probe is provided with a probe main body whereupon a contact part for contacting the inspecting object is formed, and a plurality of conductive materials having leading edge parts protruding from the contact part of the probe main body.

(57) 要約: 高速化に伴って配線構造の微細化、薄膜化が急激に進み、配線

層が極めて薄くなってきているため、従来のようにプローブに接触荷重を掛けて検査を行うとプローブが酸化膜のみならず配線層をも貫通し、また、プロー

(続葉有)